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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/559,691

04/21/2006

Paul William Chapman

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05/29/2008

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EXAMINER

LEE, GILBERT Y

ART UNIT

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3673

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,691	Applicant(s) CHAPMAN, PAUL WILLIAM	
	Examiner GILBERT Y. LEE	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 1/31/08 has been entered.

Drawings

2. The drawings are objected to because Fig. 2 seems to show the cells being stacked on top of each other, while Fig. 3 shows a single cell in cross section. The specification provides support for the single layered cell but not for the stacked cells. Fig. 2 must be amended.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cells being tensioned both when inflated and deflated and the cells assuming an untensioned shape in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 10-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the cells being tensioned, page 3, line 25-page 4, line 6, does not reasonably provide enablement for the cells assuming an untensioned shape different from the tensioned shape. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The specification does not enable the cells to have an untensioned shape different from the tensioned shape, since the cells are always in tension.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites "held in a bent state"; however, the cells are not always held in a bent state. The specification is only enabling for the cells to be held in a bent state when inflated. The claim must be amended.

Claim 10 requires that the cells be tensioned across their lengths both when inflated and deflated but also claims that when tension is released, the cells assume an untensioned shaped different from the tensioned shape. It is unclear as to how the cells assume an untensioned shape if the cells are always in tension.

Claims 11-15 are rejected for depending upon a rejected claim.

Claim 16 recites "the fasteners being affixed to structure off of the pressure pad". It is unclear as to what is being claimed.

Claims 17-20 are rejected for depending upon a rejected claim.

6. The examiner has not performed a search of the prior art for claims 10-15 due to the lack of enablement of the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Cook et al. (US Patent No. 6,349,439).

Regarding claim 1, the Cook et al. reference discloses a pressure pad (e.g. Fig. 1) comprising at least two sets of alternately inflatable cells (e.g. 1 and 2), the cells extending linearly transversely along the pad (e.g. Fig. 1) and held in place on a pad base (Figs. 5A-5C) by retaining means (e.g. 4 and 20), characterized in that the retaining means hold the cells in tension across the pad (e.g. Fig. 1).

Regarding claim 2, the Cook et al. reference discloses the retaining means being releasable (Col. 3, Lines 41-48).

Regarding claims 3 and 6, the Cook et al. reference discloses the retaining means securing the opposite ends of each cell at a predetermined distance from the centre linear axis of the cell (Figs. 5A-5C).

Regarding claims 4 and 7, the Cook et al. reference discloses the retaining means also securing the central region of the cells along the centre linear axis of the cell (e.g. Fig. 1 and Figs. 5A-5C).

Regarding claims 5 and 8, the Cook et al. reference, as best understood, discloses the retaining means comprising loop straps (e.g. 20) fixed to the pad base retaining the central region of each cell and fasteners (e.g. Col. 3, Lines 41-48) releasably retaining each end of the cell.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-9 and 16-20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US Patent No. 5,966,762) in view of Cook et al.

Regarding claim 1, the Wu reference discloses a pressure pad (Figs. 1-8) comprising inflatable cells (1), the cells extending linearly transversely along the pad (Figs. 1-2) and held in place on a pad base (20) by retaining means (11 and 12), characterized in that the retaining means hold the cells in tension across the pad (Figs. 1-2).

However, the Wu reference fails to explicitly disclose at least two sets of alternately inflatable cells.

The Cook et al. reference, an inflatable pad, discloses alternately inflatable cells (e.g. 1 and 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide alternately inflatable cells to the Wu reference in view of the teachings of the Cook et al. reference in order to prevent and manage ulcers in bedridden patients (Cook et al., Col. 1, Lines 3-6).

Regarding claim 2, the Wu reference, as modified in claim 1, discloses the retaining means being releasable (Wu, Col. 2, Lines 20-23).

Regarding claims 3 and 6, the Wu reference, as modified in claims 1 and 2 discloses the retaining means securing the opposite ends of each cell at a predetermined distance from the centre linear axis of the cell (e.g. Wu, Fig. 7).

Regarding claims 4 and 7, the Wu reference, as modified in claims 3 and 6, discloses the retaining means also securing the central region of the cells along the centre linear axis of the cell (e.g. Wu, Figs. 1-8).

Regarding claims 5 and 8, the Wu reference, as modified in claims 4 and 8, discloses the retaining means comprising loop straps (Wu, 12) fixed to the pad base retaining the central region of each cell and fasteners (Wu 11) releasably retaining each end of the cell.

Regarding claim 9, the Wu reference, as modified in claim 1, discloses the cells, as they extend transversely along the pad, are held in a bent state by the retaining means (e.g. Wu at 10 or Fig. 7).

Regarding claim 16, the Wu reference discloses a pressure pad (Figs. 1-8) including:

- a. a pad base (20)
 - b. inflatable cells (1) atop the pad base, the cells having lengths extending between opposing cell ends across the pad base (Figs. 1-2);
 - c. loops (12) extending about the cells and restraining the cells to the pad base (Figs. 1-2), the loops being spaced from the cell ends (Figs. 1-2);
- and

d. fasteners (11) at the cell ends, the fasteners being affixed to structure off of the pressure pad, whereby the cells and the pad base are held to the structure (Figs. 1-2);

wherein the loops and the fasteners urge the cells into nonlinear shapes between the loops and the fasteners (e.g. Fig. 7).

However, the Wu reference fails to explicitly disclose at least two sets of alternately inflatable cells.

The Cook et al. reference, an inflatable pad, discloses alternately inflatable cells (e.g. 1 and 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide alternately inflatable cells to the Wu reference in view of the teachings of the Cook et al. reference in order to prevent and manage ulcers in bedridden patients (Cook et al., Col. 1, Lines 3-6).

Regarding claim 17, the Wu reference, as modified in claim 16, discloses the cells are tensioned along their lengths between the loops and the fasteners (e.g. Wu, through elements 11).

Regarding claim 18, the Wu reference, as modified in claim 17, discloses the loops extending about one of the cells having central axes which are offset from a linear axis extending between the fasteners of the cell (Wu, Fig. 7).

Regarding claim 19, the Wu reference, as modified in claim 16, discloses the loops extending about one of the cells having central axes which are offset from a linear axis extending between the fasteners of the cell (Wu, Fig. 7), the offset extending in a

direction oriented at least substantially perpendicularly to the linear axis extending between the fasteners of the cell (Wu, Fig. 7).

Regarding claim 20, the Wu reference, as modified in claim 19, discloses the cells being tensioned along their lengths (e.g. Wu through elements 11).

Response to Arguments

9. Applicant's arguments filed 1/31/08 have been fully considered but they are not persuasive.

With regards to the applicant's arguments of claim 1, the argument is not persuasive because the claim only requires that the tension be across the cell. Clearly the loops provided by the Cook et al. reference will provide tension across the circumference of the cells.

With regards to the applicant's argument of claim 2, the argument is not persuasive because the claim only requires the retaining means to be releasable. Since the cells are inserted and are removable, the retaining means is being considered releasable with respect to the cells.

With regards to the applicant's argument of claims 3 and 6, the argument is not persuasive because the claims do not require an end surface of the cells to be secured. The ends of the cells are being considered to start at the straps.

With regards to the applicant's argument of claims 4 and 7, the argument is not persuasive because claims only require the central region of the cells to be secured

along the center linear axes of the cells. The applicant is arguing that the securement has to be through the axis; however, this limitation does not appear in the claims.

With regards to the applicant's argument of claims 5 and 8, the argument is not persuasive because the straps 21 will releasably retain each end of the cell to the bed as depicted in Figs. 5A-5C. The claim does not recite what the cells are attached to, nor does the claim recite that it is directly attached.

With regards to claims 9-20, see rejection above.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GILBERT Y. LEE whose telephone number is (571)272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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